<221> unsure <222> (1908)

```
WO 99/60162

SEQUENCE LISTING

Ali, Shujath
Salceda, Susana
Sun, Yangming
Cafferkey, Robert

<120> A Novel Method of Diagnosing, Monitoring and Staging
Prostate Cancer

<130> DEX-0034

<140>
<141>
```

```
<140>
<141>
<150> 60/086,265
<151> 1998-05-21
<160> 7
<170> PatentIn Ver. 2.0
<210> 1
<211> 1936
<212> DNA
<213> Homo sapiens
<220>
```

<400> 1 aatggtatgc caacttaagt atttacaggg tggcccaaat agaacaagat gcactcgctg 60 tgattttaag acaagctgta taaacagaac tccactgcaa gagggn ggc cgggccagga 120 quatetecqe ttqtecauqu caqqqqeeta aggagggtet ceacactqet getagggget 180 gttgcatttt tttattagta gaaagtggaa aggcctcttc tcaactt\tt tcccttgggc 240 tggagaattt agaatcagaa gtttcctgga gttttcaggc tatcatatat actgtatcct 300 gaaaggcaac ataattette etteeeteet tttaaaattt tgtgtteett tttgcagcaa 360 ttactcacta aagggcttca ttttagtcca gatttttagt ctggctgcac ctaacttatg 420 cctcgcttat ttagcccgag atctggtctt ttttntgtnt tttttttntt \tccgtctccc 480 caaagettta tetgtettga etttttaaaa aagtttgggg geagattetg aattgggeta 540 aaagacatgc atttttaaaa ctaggcaact tcttatttct ttcctttaaa aatacatagc 600 attaaatccc aaatcctatt taaagacctg acagcttgag aaggtcacta ctacatttat 660 aggaccttct ggtggttctg ctgttacgtt tgaagtctga caatccttga gaatcttgc 720 atgcagagga ggtaagaggt attggatttt cacagaggaa gaacacagcg cagaatgaag 780 ggccaggctt actgaggctg tccagtggag ggctcatggg tgggacatgg aaaagaagc 840 agcctaggcc ctggggagcc cagtccactg agcaagcaag ggactgagtg agcctttgc 900

aggaaaaggc taagaaaaag gaaaaccatt ctaaaacaca acaagaaact gtccaaatgc 960



WO 99/60162

<222> (2266)..(2512)

<220>

<221> unsure <222> (586)

```
tttgggaact gtgtttattg cctataatgg gtccccaaaa tgggtaacct agacttcaga 1020
gagaatgagc agagagcaaa ggagaaatct ggctgtcctt ccattttcat tctgttatct 1080
caggtgagct ggtagagggg agacattaga aaaaaatgaa acaacaaaac aattactaat 1140
gaggtacgct gaggcctggg agtctcttga ctccactact taattccgtt tagtgagaaa 1200
cctttcaatt ttctttatt agaagggcca gcttactgtt ggtggcaaaa ttgccaacat 1260
aagttaatag aaagttggcc aatttcaccc cattttctgt ggtttgggct ccacattgca 1320
atgttcaatg ccacgtgctg ctgacaccga ccggagtact agccagcaca aaaggcaggg 1380
tagcctgaat tgctttctgc tctttacatt tcttttaaaa taagcattta gtgctcagtc 1440
cctactgagt actctttctc tcccctcctc tgaatttaat tctttcaact tgcaatttgc 1500
aaggattaca catttcactg tgatgtatat tgtgttgcag ngaaaagaaa aaagtgtctt 1560
tqtttaaaat tacttqqttt qtqaatccat cttgcttttt ccccattgga actagtcatt 1620
aacccatctc tgaactggta gaaaaacatc tgaagagcta gtctatcagc atctgacagg 1680
tgaattggat ggttctcaga accatttcac ccagacagcc tgtttctatc ctgtttaata 1740
aattagtttg ggttctctac atgcataaca aaccctgctc caatctgtca cataaaagtc 1800
tgtgacttga agtttagtca gcaccccac caaactttat ttttctatgt gttttttgca 1860
acatatgagt gttttgaaaa taaagtaccc atgtctttat taaaaaaanaa aaaaaagggc 1920
                                                                  1936
ggccgccgac tagtga
<210> 2
<211> 637
<212> DNA
<213> Homo sapiens
<400> 2
gtagggcag acttactgcc ttgaacgaaa gacgatggtc ctcgctcagc ctcactccaa 60
ttatgttcct ctaggtgggg caggtagggg gtccagcttc ctgcttgctg gtggttcagg 120
tcatgcgtcc agccttgtcc cttctgacct gggccctacc cacggggaaa tgttcccata 180
gcagaagaat cagccccaca gtgcaggggt gtgttagtgg ggaacgggct ctgggctcct 240
gtgggaacca gggaccccct atcttggtac cggtcattgg atgtatcccc agctcatgcc 300
tgtgtctgtc ttggcccgtg tggtcaccct gtgttcatct ctctcccagc catggcctct 360
caaactgggg ttttcgtctc cctatgaggg ggtcctggta tgtacgcgtt cggtgggccc 420
geggtgeatg teteceggtg cagtgeatge tggggtteee tggggeeetg ggeeeetegt 480
aggatagaca gagcctgtcc taaccttccg gaagtgcatg ctggggaggc cccttgcctg 540
ctgaccttct gtgctcagga cgactaatcg gccacatgac caccactctg tcccatggga 600
ttcctagaga agtctcacta agagcccagc acactca
                                                                   637
<210> 3
<211> 2693
<212> DNA
<213> Homo sapiens.
<220>
<221> unsure
```



```
<220>
<221> unsure
<222> (1480)
<220>
<221> unsure
<222> (1532)
<220>
<221> unsure
<222> (1562)..(1566)
<220>
<221> unsure
<222> (1569)
<220>
<221> unsure
<222> (1571)
<220>
<221> unsure
<222> (1631)
<400> 3
gctcctacag ccgcatctgc gttaacatag catccctatg gccactgtct cccttgatcc 60
ccacaqccat cctaqqaqaa aqqcaqaatg tcataatttg ctaaaaaggga tgctgaggct 120
ctgggaggga aagggacttg cctaaagccc cagggtgaag cagcatctct ggactcccag 180
tocagtgate ttgcccaata ctttgctgct tgcctatace cetetaactt ggtcaacage 240
acatcacagg gcaagcccaa tccctgcttc atttttatat atgggcgctg gtccacagcc 300,
ccactctcca gccatttgga aacaaaaaca gatgctattg ttcttcctta gagaacgtgg 360
ccagtggaga cggcacactg gaaatcagag tgaatgttct tgaaagaggg tcacgggtca 420
acaaggccca gccaaaggat gcagtagaac cattttcctt agaaatcttt gggagtgaag 480
taggetteag ceactaceea tecetgeeet tgeggetace actaceceat tagtttagae 540
agggtcgggc ggggagggt gtggagaaga aatgagcttg cctgtngccc ccaggctccc 600
tetgteetag eteaggtetg ggtgeeatte tttacacteg tgtgeteget caegeacaca 660
tcacacact tgctggtcac acagtcacag actcgcctct gctcctgtgg tccagtggcc 720
ggacaccccc tgggatggct caaaggagtc aggacttgga agtggggaca tcagggtagc 780
tgaaggaaat ccacacaccc agagcatete ggagtteaga eteteagaee tgaagtagge 840
gcccccggga ctgggctagg agttggacgg aatggaggat ggaggacagc gagaagaaag 900
gaagagaaat gcaaagtgtg ggcagccgcc aagagtgaaa atagagggaa gtgtcatgca 960
agtgctggac agaaggcggc aggtgggacg agccccacag cccctcctc aaaaacgacc 1020
acctccagga ctcagtgatc cctggggggc aggctctgcc agccctcggc cacacgtggc 1080
tccggcaccc atggtcccag tgccttggat ggagacggcc agttctggcg gccagatgtg 1140
gtgctctgga atccagtccc atttccttcc tggccacgcc tgttccagcg gcctctttgg 1200
ctgcattcag cccctactta cctggggacc ccggctgggg cacaagagca ccaggggggt 1260
agggcccaaa gggatcaggg gaagcctctg gcctggaggg tatggggcac gcttccccaa 1320
```

<222> (52)



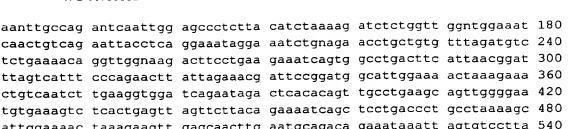
```
gggcggaccc ggcaggagga agcccaggag ctgggtcctg ccgcccagga gctgggccct 1380
gccacccagg ccgggctagg gacatggcag ggcctgggca tcctgacgct ggacttgggc 1440
gacctgggag gcacagggag gggagagatg ggcggccccn acccagcgca gtgccggcca 1500
caccccaagg cggttgccag agcttaaggc cnggccccag caggagaaca tcccagctcc 1560
annnnncene neegeageea gtgeteettg teaageteee eeegteacte eaggtgggag 1620
ccacccggt nagggggtgt gccacttgcc cccagggcac tcctctgggc atcccgggtg 1680
ggggattttg gggccgtggg gggcagtctc tggtacctgt gtgcgtcagg gatgctctgc 1740
acctgcaacc aggtgtcgtc cacgggcggg ggcatgggca tggtgacagt ggtcctgttg 1800
atgtcaccga tgatgctgag cgcctccttc agcgcgtggt gcatgtgcag catctcgtcg 1860
tgctgctgtg cctgctctgc caactcctcc atcagtgtgt tctggttccc acatgagtac 1920
atattggcca gcggctccga gatgatgaac tccggggtct gagagtgggc aaacagggaa 1980
gaaggttggg acctggtgcc tgtgccgccc tggctgcctt gctgggccct tctgggactg 2040
tgcgctggac ttggagcccc ttggagtatg gcttttcaca cgggcttcta taccgcttcg 2100
actggaagat ccacctcccc actgcctttt ctcactcaga tggggacacc gaggtccaga 2160
ggaaaagaca cctgtcaaat gtcacagatc tgggagggga cttaagacct atcatgccaa 2220
gaggacacct gtctactcag tttttttttg gtggggcggg gggcgnnnnn nnnnnnnnn 2280
agttgatgcc tggatacagg agctctgtgg gtgggagtga gacaaaacac agggtcctga 2580
gctctgggga ccaagcaatg tcctctggtg aaaaaaatcc tggacttgct ggcagaagat 2640
ttgcctctta cttqccatqt qctctgaata catttacctg ccctctggga aaa
<210> 4
<211> 292
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (284)
<400> 4
aagaatatga gatttgctta gaaatgaagg actggaagga gcccacagag ttattttta 60
aactatccag taaggcttag agggtttcaa tcagaaatat gtgttagggg aaaaaatgca 120
ctttttctat attaaaaaat attatttct tcttttaaat gtaaagcatt cctattgtga 180
agaattgaga aaatacagaa aagtacaaag aaaaacatta cctacaactc caccatccgt 240
                                                         292
gattatcact gttcacattt gtggctcatt tttcagtatk tctnttattt aa
<210> 5
<211> 2694
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
```



- <220>
- <221> unsure
- <222> (74)
- <220>
- <221> unsure
- <222> (76)
- <220>
- <221> unsure
- <222> (80)
- <220>
- <221> unsure
- <222> (92)
- <220>
- <221> unsure
- <222> (97)
- <220>
- <221> unsure
- <222> (123)
- <220>
- <221> unsure
- <222> (132)
- <220>
- <221> unsure
- <222> (173)
- <220>
- <221> unsure
- <222> (217)
- <220>
- <221> unsure
- <222> (257)
- <220>
- <221> unsure
- <222> (2539)
- <400> 5

tactatattg ctcagcattt ctaagtattc tctaagtgct ctttatttat gntttaaaat 60 agctctctta cccngntgcg ncgactagaa gancttgntt taggaaacaa tgaaatatat 120





attggaaaac taaagaagtt gagcaacttg aatgcagaca gaaataaatt agtgtcctta 540 ccaaaagaga tcggcgggtg ctgcagcctc actgtgttct gtgtacgtga caacagacta 600 actcggatac ctgcagaggt gtcacaggca acagaacttc atgtcctgga tgtggcaggg 660 aacaggttgc tgcatctacc tttatccctg actgccttga agttgaaggc tctgtggcta 720 totgacaaco agtoccagoo cotgottaca ttocagacag acacagacta caccacagga 780 gagaagattt taacctgtgt cttacttcct cagctgcctt ctgaacctac ttgtcaagag 840 aatctgcctc gctgtggtgc actggagaac ttggtaaatg atgtctctga tgaagcctgg 900 aacgagcgtg ctgtcaacag agtcagtgcg atccgatttg tggaggatga gaaagatgaa 960 qaaqacaatq aqacqaqaac acttctaagg cgagccactc cacacccagg ggagttaaag 1020 cacatgaaaa agacagtgga gaatttacgg aatgacatga atgctgctaa aggactggac 1080 tcaaacaaaa acgaggtcaa tcatgccatt gaccgagtga ccacttctgt gtagagtttc 1140 acctccaagt tttacctcct gtgtcttcct ctgctgtcga gacgttcctg tctgcttccc 1200 gggagcetca egtgeteett gteetaacca geeceegege geeatettee egtggagtgt 1260 ggggaagetg etgteteeca ggaagtgeet tacteateee gcaaccagte agegeaccag 1320 tggtctcccg gtgtgatttt ttttttttt aatttcagtt gtttgtaata agtagaatac 1380 actactgtaa acatacgacc tttgtttttg tcttatgttg gggtaaagga aagcaggaag 1440 gggaattttt atcctcctcc cttccgtaaa gtgctgggat attttgaatc ccccaagttc 1500 ccttggacct actgatgaga gatagtttta tgtatgggga aaaatggata ctttttaaac 1560 cttttttggc agctcagatg gtgtaaattt taaaattttg tataggtatt tcataacaaa 1620 aatatqtatt tcttttttqt tattttatct tgaaaacggt acatatttta gtatttgtgc 1680 agaaaaacaa gtcctaaagt atttgtttt atttgtacca tccacttgtg ccttactgta 1740 tcctgtgtca tgtccaatca gttgtaaaca atggcatctt tgaacagtgt gatgagaata 1800 ggaatgtggt gttttaaagc agtgttgcat tttaatcagt aatctacctg gtggatttgt 1860

ttttaaccaa aaagatgaat tatcaatgat ttgtaattat atcggttgat tttttttgaa 1920 aagatgaacc aaaggatttg actgctaata ttttattcct tacacttttt ttctgaataa 1980 gtctctcata atgagtgcag tgtcagactg tgcctactct gatggtatgt gccatttgta 2040 aaataaaata gagcagaaaa acacaaaaag agaacactgg ttcagacatt cagtgggcaa 2100 gtaaattatg gactgcaaaa taatgattt tattcaagaa agctttaaaa gttttatatc 2160 cagatataca accacaataa agcaaaataa cctactatca aaatagaaat gttgctatct 2220

ttataagtgc aatttaattt gtaaatagag tttgaatcaa agtatcacaa aatactgctt 2280 caagatttaa ttttaaatct gctaatttaa gggatattgg gaaaagtttt ggtgtgtttc 2340 tgttgattc ttttttgtat gctgtgataa aagagaaatg aaaagtgcca gtcactgtgt 2400 ggtgtctagg aaaatcatat atatttttt ctccaagaaa taaattcatc ctggacattg 2460 gccatacagc tttttaaaat tattactttg tatgttcaag tgatagcagg tagccaaatt 2520

ctttgacagt gtgctctgnt ctgttaaata tctaaattac ccgtcagttg tgagtgacct 2580 cctgtgggac ttgcattcac atggggcaga gcccagaatt gcctttgact ctggctagta 2640 attttgggtt gtggctatct ggccaattgg actccttata aacccgtctt caac 2694

<210> 6 <211> 1335 <212> DNA

<213> Homo sapiens



WO 99/60162



```
<220>
<221> unsure
<222> (17)
<400> 6
tcatatagta ggaaganaag cacctaggtt tgaggccagg gctggctgct gtcagaacct 60
aggecetece etgeettget ceacacetgg teaggggaga gaggggagga aagceaaggg 120
aagggaccta actgaaaaca aacaagctgg gagaagcagg aatctgcgct cgggttccgc 180
agatgcagag gttgaggtgg ctgcgggact ggaagtcatc gggcagaggt ctcacagcag 240
ccaaggaacc tggggcccgc tcctccccc tccaggccat gaggattctg cagttaatcc 300
tgcttgctct ggcaacaggg cttgtagggg gagagaccag gatcatcaag gggttcgagt 360
gcaageetea eteccageee tggcaggeag eeetgttega gaagaegegg etactetgtg 420
gggcgacgct catcgcccc agatggctcc tgacagcagc ccactgcctc aagccgtggc 480
cgctacatag ttcacctggg gcagcacaac ctccagaagg aggagggctg tgagcagacc 540
cggacagcca ctgagtcctt ccccaccc ggcttcaaca acagcctccc caacaaagac 600
caccgcaatg acatcatgct ggtgaagatg gcatcgccag tctccatcac ctgggctgtg 660
cgacccctca ccctctcctc acgctgtgtc actgctggca ccagctgcct catttccggc 720
tggggcagca cgtccagccc ccagttacgc ctgcctcaca ccttgcgatg cgccaacatc 780
accatcattg agcaccagaa gtgtgagaac gcctaccccg gcaacatcac agacaccatg 840
gtgtgtgcca gcgtgcagga agggggcaag gactcctgcc agggtgactc cgggggccct 900
ctggtctgta accagtctct tcaaggcatt atctcctggg gccaggatcc gtgtgcgatc 960
acccgaaagc ctggtgtcta cacgaaagtc tgcaaatatg tggactggat ccaggagacg 1020
atgaagaaca attagactgg acccacccac cacagcccat caccctccat ttccacttgg 1080
tgtttggttc ctgttcactc tgttaataag aaaccctaag ccaagaccct ctacgaacat 1140
tctttgggcc tcctggacta caggagatgc tgtcacttaa taatcaacct ggggttcgaa 1200
atcagtgaga cctggattca aattctgcct tgaaatattg tgactctggg aatgacaaca 1260
cctggtttgt tctctgttgt atccccagcc ccaaagacag ctcctgccat atatcaagtt 1320
                                                                   1335
tcaataaata tttct
<210> 7
<211> 1079
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (268)
<220>
<221> unsure
<222> (688)
 <220>
 <221> unsure
 <222> (700)
<400> 7
```





tttttgaaga	atgccctgca	aggcatcaac	tggaatgtgt	ttattaccaa	acaagacaga	60
agagaaccag	ggcctgactt	ggcagtggcc	ccaggctgca	tgggctcagg	taggctcaga	120
ccggccccag	gagtgggaga	gcccagagaa	gagggaaaaa	gagtagtggc	caggaggggt	180
	catgccactc					
	gacaccgggc					
	ccacagtcca					
	cccgccttgg					
ggaaactgta	cttgaggaag	aggtggttgc	acatagagtt	gtttatgatg	gcgacctgaa	480
cttcctggag	ggtgtgggga	gatggcagtg	cctcatcctc	tttgatgtac	ccccagccag	540
tcacccagca	gtctgtccgg	ttctcaaact	caaatgtgga	ggcctggaga	cagatgggct	600
	agtgtaggtg					
	ttagcgaggg					720
	ccagaaggat					780
	aaggtcacta					840
ggctgagcag	gctcactccg	catacgtggg	aatcccacag	gcgcaggctc	ccctgccacg	900
	gagttcggcg					960
	tgataagggc					1020
	cgccagcagc					1079